Transposed into the quantity of gas which contains 1 kilogramme 0, the above numbers yield :—

Cubic jiii'l res.	Culiir ini'i res.	(luliic metres.	Cubic nioltvs.	Cubic, inetros.	Cubic, metres.
CO,	(KM	0-57	(>3()	CH6	1-27
00	l'f)2	1-20	1-50	1-40	0-59
II	(KM	. (>f)5	0-35	0-56	1-24
N	0-05	(HO	0-06	0-07	0-07

It appears that the prosonce of great amounts of hydrogen favours the reaction, whilst minute amounts have lifetl 3 influence, and herein may lie the cause why these reactions have seldom received attention in practical management.

The hydrocarbons are more sensible to the influence of temperature than carbon monoxide and .water-vapour. Theso constitute a not inconsiderable portion of the distillation gases, and are very valuable) for heating purposes. • The hydrocarbons split up on heating to more than 700°, giving off carbon which deposits itself an soot in tliB gas conduits and checkers of the regenerators, and the phenomenon is the more perceptible, the won* concentrated the hydrocarbons in the gas aro-BeHidciB this, the hydrocarbons are also exposed to change by the action of other gases.

Than, for example, methane and carbonic acid produce changes which the experiments of Lang (q.v.) demonstrate. The mixture of methane and carbonic acid exhibited, before and after heating, the following contents of 00$ and CO : —

Afliu1

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'IVi	.I-mlum.	CO..	CO
		I'l'I' C.'llU	Pur cci.u
VOIJ	to HI	4 1	()'()
"	4"		
<)5-	to 1,05-	2t)'H	6-4 '
i"	1"		
Ml'	to 1,0/H1'	ao-i	8-2

The exchange took place according to the formula, 011*4 + —-that is to say, it yielded carbon monoxids